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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/848,048	05/03/2001	John E. McGunnigle	102088-0001	5582

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CESARI AND MCKENNA, LLP
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BOSTON, MA 02210

EXAMINER

DAO, MINH D

ART UNIT	PAPER NUMBER
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2618

MAIL DATE	DELIVERY MODE
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09/24/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/848,048	MCGUNNIGLE, JOHN E.	
	Examiner	Art Unit	
	MINH D. DAO	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 07/02/07 have been fully considered and are persuasive. However, upon further consideration, the examiner has amended his interpretation of the references which resulted in this rejection in view of Henry (5,590,396) and Cantwell (US 5,917,827).

In response to applicant's remarks, pages 6-8, that Henry does not teach "wireless interoffice facility for carrying all types of traffic normally carried by the PSTN" which is admitted by examiner in previous office action, and that Cantwell does not teach the limitations that Henry lacks. Applicant's arguments are against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this case, Henry teaches a wired line PSTN connection that connects between the two PSTN networks (see fig. 1), Cantwell teaches a microwave network facility that wirelessly provides connection between two tandem switches and central offices (see fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide the above teaching of Cantwell to Henry in order for the combined system to support different

interface signals in different formats without having to replace or upgrade existing switching equipment, and to improve system bandwidth as taught by Cantwell . In addition, Cantwell's microwave network facility is part of a PSTN (admitted by applicant in page 8 of the remarks). Therefore, once combined, Henry and Cantwell teach the limitations recited in claims 1,7,8, and 14 of the present application.

In response to applicant's remarks, pages 6-8, that Henry does not "address the problem of a lack of bandwidth in particular portions of the PSTN". This limitation is not recited in any of the independent claims of the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-14 rejected under 35 U.S.C. 103(a) as being unpatentable over Henry (5,590,396) in view of Cantwell (US 5,917,827).

Regarding claim 1, Henry teaches a public switched telephone network (PSTN) communication network comprising: a plurality of microwave transceivers forming a microwave network which overlays the public switched telephone network, the

Art Unit: 2618

transceivers being geographically located so as to provide a wireless interoffice facility (IOF) for carrying all types of traffic normally carried by the PSTN between two or more central offices, tandem switches or other premises controlled by an incumbent local exchange carrier (ILEC) (see fig. 1, PSTN lines 117; col. 3, line 59 to col. 4, line 12). However, Henry does not disclose a plurality of microwave transceivers forming a microwave network which overlays the public switched telephone network, the transceivers being geographically located so as to provide a wireless interoffice facility. Cantwell, in an analogous art, teaches an interoffice trunks between two inter-exchange tandem switches and central offices using transmission technologies such as satellite, **microwave**, coaxial or fiber optic systems for the purpose of enhance advanced telecommunication services that require high bandwidth communications (see fig. 1; col. 1, lines 16-24; col. 4, lines 4-12). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide the above teaching of Cantwell to Henry in order for the combined system to support different interface signals in different formats without having to replace or upgrade existing switching equipment, and to improve system bandwidth as taught by Cantwell (see col. 1, lines 16-24; col. 2, lines 34-38).

Regarding claim 2, the combination of Henry and Cantwell teaches the microwave communication network as in claim 1 wherein one or more of the microwave transceivers is located proximate to one or more of the central offices, tandem switches or other premises (See Cantwell, figure 1, the microwave system of interoffice trunks 18).

Regarding claim 3, the combination of Henry and Cantwell teaches the microwave communication network as in claim 1 wherein the ILEC provides insufficient wireline bandwidth between two or more of the central offices, tandem switches or other premises, and the microwave network provides wireless bandwidth as an alternative communication path (see Cantwell, col. 1, lines 16-57).

Regarding claim 4, the combination of Henry and Cantwell teaches that the microwave communication network as in claim 1 wherein the wireless IOF provides redundancy to the public switched telephone network (see Cantwell, col. 2, lines 34-52).

Regarding claim 5, the combination of Henry and Cantwell also teaches that the microwave communication network as in claim 1 wherein the wireless IOF provides bandwidth at a lower cost than the public switched telephone network (see Cantwell, col. 1, lines 16-57). It is also well known to one of ordinary skill in the art that the cost of providing wireless service in general is less than the cost to build up a wireline network.

Regarding claim 6, the claim is interpreted the same as claim 5, therefore is rejected for the same reason set forth in claim 5.

Regarding claim 7, the rejection of claim 1 is herein incorporated. In addition, Cantwell teaches providing wireless bandwidth using microwave system (see Cantwell, fig. 1).

Regarding claim 8, the rejection of claim 1 is herein incorporated.

Regarding claim 9, the combination of Henry and Cantwell teaches that the microwave communication network as in claim 8 wherein one or more of the microwave transceivers is located proximate to one or more of the central offices, tandem switches or other premises (See Cantwell, figure 1).

Regarding claim 10, the claim is interpreted the same as claim 3, therefore is rejected for the same reason set forth in claim 3.

Regarding claim 11, the claim is interpreted the same as claim 4, therefore is rejected for the same reason set forth in claim 4.

Regarding claim 12, the claim is interpreted the same as claim 5, therefore is rejected for the same reason set forth in claim 5.

Regarding claim 13, the claim is interpreted the same as claim 6, therefore is rejected for the same reason set forth in claim 6.

Regarding claim 14, the rejection of claim 1 is herein incorporated.

Art Unit: 2618

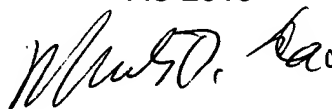
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MINH D. DAO whose telephone number is 571-272-7851. The examiner can normally be reached on 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MATTHEW ANDERSON can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MINH DAO
AU 2618

A handwritten signature in black ink, appearing to read 'Minh Dao', is written over the typed name and unit number.